

Name _____

Climate Changes

Nothing is certain about the weather except that it will change...

You have charted many changes on the Earth over its history. Now it is time to think about what they can tell us about Earth's climate.

Work with a group to answer these questions:

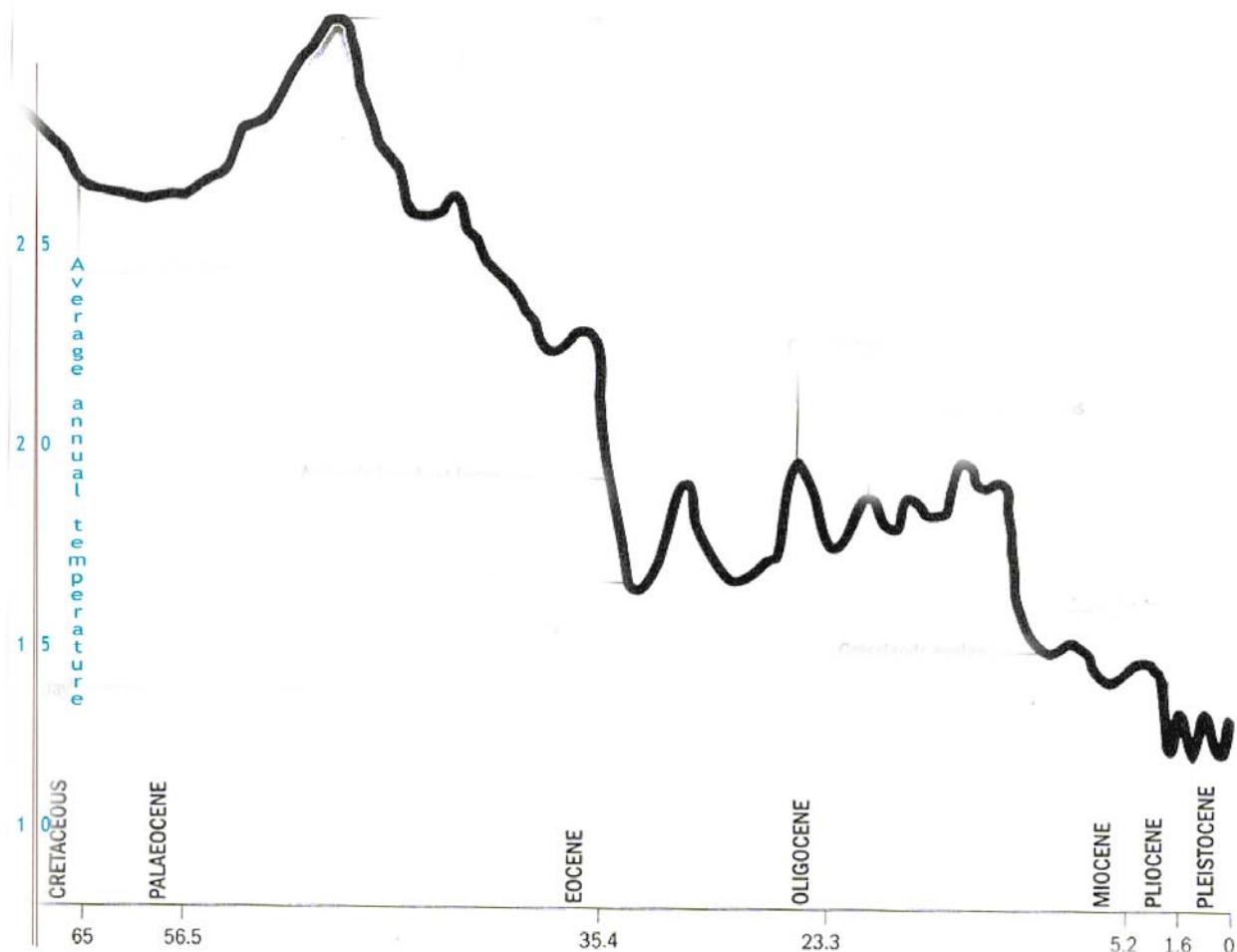
1. Michigan once had corals, but has none now. What does this tell us about Michigan's climate? _____
2. Lystrosaurus and other cold-blooded animals would have required warm temperatures. But fossils of them have been found in Antarctica. What does this tell us about Antarctica? _____

3. Using map pieces, arrange the continents to simulate the ancient continent of Pangaea. Then slowly move the continents to locations similar to their current locations. As you do, think about the changes that might have occurred in the climate. (Remember where the Equator would have been, and the location of Earth's oceans.) What can you infer about the changes that would have occurred in these continents during the Mesozoic Era? _____

Continent	Location/Climate at beginning of Mesozoic	Location/Climate at the beginning of the Cenozoic
Antarctica		
Australia		
Western Africa		
Eastern South America		

4. During the Mesozoic, there were both large reptiles and very small mammals on Earth. Which organisms would have been able to survive the change in climate? _____ Why? _____

The climate of the continents has continued to change during the Cenozoic Era. Look at this graph, adapted from *Walking with Prehistoric Beasts*.



5. What is the general trend of climate change do you see for the Cenozoic Era? _____
6. The Antarctic Ice Sheet began to form in the Eocene. What could have caused this? _____
7. In 2002 meteorologists found the first evidence of the breakup of the Antarctic ice sheet in recorded history. To what might that be attributed? _____

8. What was Michigan like during the Pleistocene? _____

9. What might have caused these changes? _____
